

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/JP2004/014809

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 G02B6/12

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 G02B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)  
EPO-Internal, INSPEC, COMPENDEX, IBM-TDB, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	XUAN-MING DUAN ET AL: "Micro/nanofabrication of two and three dimensional structures by two-photon polymerization" PROCEEDINGS OF THE 2003 THIRD IEEE CONFERENCE ON NANOTECHNOLOGY, 12-14.08.2003, SAN FRANCISCO, vol. 2, 12 August 2003 (2003-08-12), pages 498-501, XP010657652 the whole document	1-5,9
X	EP 1 089 095 A (KABUSHIKI KAISHA TOSHIBA) 4 April 2001 (2001-04-04) paragraphs '0021! - '0031!, '0074! - '0095!, '0116! - '0132!; figures 1-3,6,7 ----- -/--	1,2,4,5,9

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- 'A' document defining the general state of the art which is not considered to be of particular relevance
- 'E' earlier document but published on or after the international filing date
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- 'O' document referring to an oral disclosure, use, exhibition or other means
- 'P' document published prior to the international filing date but later than the priority date claimed

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- 'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- 'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- '&' document member of the same patent family

Date of the actual completion of the international search

25 November 2004

Date of mailing of the international search report

03/12/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>MIZEIKIS V ET AL: "Femtosecond laser microfabrication of photonic crystal structures by glass damaging and resin protosolidification"</p> <p>PROCEEDINGS OF THE 4TH PACIFIC RIM CONFERENCE ON LASERS AND ELECTRO-OPTICS, 2001, vol. 1, 15 July 2001 (2001-07-15), pages I302-I303, XP010566130</p> <p>the whole document</p>	1,2,4,5,9
X	<p>SHOJI S ET AL: "PHOTOFABRICATION OF A PHOTONIC CRYSTAL USING INTERFERENCE OF UV LASER"</p> <p>PROCEEDINGS OF THE SPIE, SPIE, BELLINGHAM, VA, US, vol. 3740, 16 June 1999 (1999-06-16), pages 541-544, XP000997328</p> <p>ISSN: 0277-786X</p> <p>the whole document</p>	1,4,5
X	<p>DONGMIN WU ET AL: "Fabrication and characterization of THz plasmonic filter"</p> <p>PROCEEDINGS OF THE 2002 2ND IEEE CONFERENCE ON NANOTECHNOLOGY, 2002, 26 August 2002 (2002-08-26), pages 229-231, XP010603121</p> <p>page 230, paragraph III; figures 1,2</p>	1,3,5,6
X	<p>WO 02/084340 A (HARVARD COLLEGE)</p> <p>24 October 2002 (2002-10-24)</p>	1,7
Y	<p>page 41, line 15 - page 42, line 3; figures 6,7</p>	8
X	<p>SUN HONG-BO ET AL: "Three-dimensional photonic crystal structures achieved with two-photon-absorption photopolymerization of resin"</p> <p>APPLIED PHYSICS LETTERS, AMERICAN INSTITUTE OF PHYSICS. NEW YORK, US, vol. 74, no. 6, 8 February 1999 (1999-02-08), pages 786-788, XP012023193</p> <p>ISSN: 0003-6951</p> <p>the whole document</p>	1-3,5,9
Y	<p>HUTLEY M ET AL: "Microlens arrays"</p> <p>PHYSICS WORLD, IOP PUBLISHING, BRISTOL, GB, July 1991 (1991-07), pages 27-32, XP002214521</p> <p>ISSN: 0953-8585</p>	8
A	<p>pages 30-32; figures 10-13</p>	7
A	<p>US 2002/070352 A1 (BORRELLI NICHOLAS F ET AL) 13 June 2002 (2002-06-13)</p> <p>paragraphs '0022! - '0036!; figures 1-4</p>	1-9

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2004/014809

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1089095	A	04-04-2001	JP 2001091912 A	06-04-2001
			JP 2001100001 A	13-04-2001
			CN 1305118 A	25-07-2001
			DE 60004146 D1	04-09-2003
			DE 60004146 T2	26-02-2004
			EP 1089095 A2	04-04-2001
			US 6456416 B1	24-09-2002
WO 02084340	A	24-10-2002	EP 1377853 A1	07-01-2004
			WO 02084340 A1	24-10-2002
			US 2004027675 A1	12-02-2004
US 2002070352	A1	13-06-2002	AU 1198801 A	12-06-2001
			WO 0140845 A1	07-06-2001